Guidance on Subject Assessment at Key Stage 3
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Introduction

Assessment can affect pupils’ motivation to learn. It plays a crucial role in improving learning and raising standards (Stiggins, 2008). Assessment is a key professional competency (GTCNI, 2011) that requires teachers to:

• use a range of assessment strategies to assess pupils’ learning;
• appreciate the uses and limitations of these strategies;
• make evidence-based assessment against relevant criteria;
• involve pupils in assessing their learning and performance;
• assess pupil performance against relevant benchmarking data;
• understand the relationship between assessment, setting pupil targets and progression;
• use assessment information to make teaching more effective; and

The Northern Ireland Curriculum sets out a flexible framework of knowledge, understanding, skills and capabilities. These are important for lifelong learning and help to prepare young people to meet the challenges of life and work in the twenty-first century.

Assessment is an integral part of the Northern Ireland Curriculum. It must reflect curriculum requirements and provide constructive, motivating and challenging learning experiences. Assessment should be part of the teaching and learning process that supports independent learning. It should enable young people to gauge their own progress and potential and make improvements in their learning.

Aims

The teacher’s role is central to ensuring quality assessment in schools (Wyatt-Smith et al., 2010). Teachers and schools must have sound knowledge of assessment and the professional skills to develop and apply this in practice (GTCNI, 2011). This is associated with the notion of assessment literacy, which Webb defines as:

knowledge about how to assess what students know and can do, interpret the results of these assessments, and apply these results to improve student learning and program effectiveness. (2002)

Improving teachers’ assessment literacy is essential to developing their competency to assess pupils’ learning. It helps teachers to be more consistent and understanding in their professional judgements.

This guidance supports principals, senior leaders/managers and teachers to plan and develop subject assessment at whole-school and departmental levels. It aims to encourage and promote:

• effective and manageable assessment planning, marking, judgements and standard setting;
• pupils’ active involvement in peer and self-assessment, including setting and reviewing their own learning targets and identifying areas for development;
• constructive use of feedback to improve learning;
• effective use of assessment data to:
  – inform teaching and learning;
  – track progress; and
  – promote improvement (DENI, 2009a); and
• the development of coherent and manageable assessment practices that support equity and fairness for all and reflect the Northern Ireland Curriculum and school improvement strategies (ibid.).

This guidance focuses on continuing professional development, connected with school Performance Review and Staff Development (PRSD) programmes (Regional Training Unit [RTU, 2005). It is intended to help teachers to become more competent practitioners of quality assessment.

We have included eight school case studies. These are referenced in the text and should be read alongside the guidance. They illustrate how schools have planned and developed different aspects of assessment within subjects in ways that reflect the assessment guidance. You can find these at www.nicurriculum.org.uk
Section 1

General Principles
Informing Quality Assessment
What is assessment?
For the purpose of this guidance we define assessment as the systematic collection, interpretation, and use of information to give a deeper appreciation of what pupils know and understand, their skills and personal capabilities, and what their learning experiences enable them to do.

Principles of assessment
The following five principles underpin quality assessment practice. It should:
• be complementary to and supportive of learning;
• be valid and reliable;
• be fit for purpose and manageable;
• support teachers’ professional judgement; and
• support accountability.

Purposes of assessment
Assessment can serve different purposes according to how we use the information it provides (Teaching and Learning Research Programme [TLRP], 2010; Appendix 1). The four main purposes of assessment are:
• diagnostic assessment – to identify strengths and areas for improvement and inform next steps;
• formative assessment – to make specific improvements in learning;
• summative assessment – to acknowledge, record and report pupils’ overall achievement at a given point; and
• evaluative assessment – to inform curriculum planning and provide information for monitoring and accountability.

Schools should take the different purposes of assessment into account when developing assessment policy and practices.

Diagnostic assessment
Diagnostic assessment normally takes place at the beginning of a learning programme. It involves the teacher working closely with the pupil to identify their strengths and learning needs. Teachers use it to identify the nature of a pupil’s learning difficulties. Teachers can then use the information from diagnostic assessment to plan and develop interventions to address the learning difficulties identified. They should share this information with the pupil to plan the next steps to improve their learning.

Formative assessment or Assessment for Learning (AfL)
Formative assessment is part of the everyday teaching and learning process. Teachers gather evidence about a pupil’s learning by, for example, observing, listening, questioning, discussing, and reviewing their work. They can then use this evidence to:
• identify progress and gaps in learning (including individual support needs);
• set learning goals and success criteria; and
• provide feedback to pupils.

Formative assessment is often referred to as Assessment for Learning (AfL).

Assessment for Learning is the process of seeking and interpreting evidence for use by learners and their teachers to decide where the learners are in their learning, where they need to go and how best to get there.
(Assessment Reform Group [ARG], 2002)
Teachers use AfL to enable pupils to build on their learning. The continuous process of dialogue and interaction between pupils, teachers and peers is an essential part of AfL. It focuses on how pupils can improve their learning. AfL involves peer and self-assessment (ARG, 2008; Black and Wiliam, 2009).

Ten guiding principles underpin AfL. It should:

• be part of effective planning;
• focus on how pupils learn;
• be central to classroom practice;
• be a key professional skill;
• be sensitive and constructive;
• foster motivation;
• promote understanding of goals and criteria;
• help learners know how to improve;
• develop the capacity for self-assessment; and
• recognise all educational achievement (ARG, 2002).

Five key AfL strategies support these principles in classroom practice:

• **Focus on learning** shares learning intentions and success criteria with pupils.
• **Effective questioning** encourages pupils to think about their learning.
• **Quality formative feedback** allows teachers to identify pupils’ achievements, any gaps in their learning and areas for further work (what pupils have done well and what they should do to perform better). Feedback should always be direct and constructive. It should give pupils information about the next steps to take to improve their learning. Teachers should give feedback promptly, as delayed feedback can be meaningless to the pupil. Prompt feedback helps pupils to take account of it in their learning. It also motivates them, which is a crucial element in helping them to become successful learners.
• **Scaffolding reflection** gives pupils time to reflect on their learning. It allows them to think about what and how they are learning and to adapt their approaches, if necessary, to achieve their goals ([Assessment for Learning A Practical Guide](#), CCEA 2009a).
• **Teacher reflection** on effectiveness of teaching and learning allows teachers to verify what their pupils have learned. This helps them to decide what they may need to teach again in a different way, or how to focus future teaching plans.

### Summative assessment

Summative assessment gives pupils, parents and teachers valuable information about a pupil’s overall performance at a specific point in their learning. It provides information about a pupil’s progress in subject knowledge, understanding, skills and capabilities.

Summative assessment usually takes place after pupils have completed units of work, or modules, or at the end of each term and/or year. The information it gives indicates progress and achievement, sometimes in grade-related or numerical terms.

Summative assessment should:

• take account of all the objectives or outcomes of the programme of study (this is why summative tests of part of the programme of study are not necessarily valid);
• be used to indicate a pupil’s progress at the end of a period of learning, for example a unit of work or a module;
• take account of formative assessments throughout the year;
• be formative in its own right, giving:
  - teachers insights into what pupils have and have not learned, enabling them to adapt their practices; and
  - feedback on what learners did or did not do well.

Subject teachers and school managers can use the outcomes of summative assessment for:

• benchmarking;
• monitoring progress;
• target setting;
• placing pupils in subject classes; and
• helping pupils to make informed decisions about subject choices at Key Stage 4.
The quality of summative assessment depends on teachers’ professional ability to use a range of assessment methods that generate dependable results (TLRP, 2010). Teachers, pupils and parents need to be confident that the information provided by teacher-based assessment is dependable and an accurate reflection of the standard a pupil is working at. This is particularly important in the Cross-Curricular Skills, where teachers summatively assess pupils at the end of Key Stage 3 and give pupils numerical levels. These are used to monitor school and system wide performance. For these reasons teacher-based assessment must be both valid and reliable.

**Evaluative assessment**

The main purpose of evaluative assessment is to ensure that there is appropriate accountability at all levels for the performance of our school system (CCEA, 2011). Evaluative assessment is used to inform curriculum planning and provide information for monitoring and accountability. For evaluative purposes, the Department of Education requires information on end of Key Stage 3 assessment outcomes for the Cross-Curricular Skills. Schools can use this data for school development and action planning. Teachers can also use this data to set class targets to improve specific pupil outcomes.

**The relationship between formative and summative assessment**

Formative and summative assessment have been seen as serving two separate purposes. Formative assessment focuses on improving learning. Summative assessment summarises learning at the end of a period of study. Recently, however, formative and summative assessments have been recognised as interrelated and complementary. They can serve both purposes, depending on how teachers use the assessment information and feedback (Black et al., 2003; Harlen, 2005; Taras, 2005). Research suggests that teachers could make better use of assessment by taking into account this interrelationship (ARG, 2008).

The information from formative assessment, supplemented by valid subject class tests/tasks, helps to ensure dependable summative assessment (Harlen, 2005).

Teachers can use the information from a summative assessment test/task as feedback to support pupils to improve their learning. Teachers should ‘report not only the students’ final performance, but also what processes students need to improve in order to raise their performance’ (Harlen, 2005).

Research suggests (Black et al., 2003; Black et al., 2010; Black et al., 2011; Harlen, 2005) that teachers should make greater use of summative assessment to support learning by:

- giving pupils opportunities to review their work before the assessment to become familiar with the type of assessment set and to identify areas of insecure understanding;
- involving pupils in developing assessments and setting assessment criteria and mark schemes to help them develop their understanding of assessment and focus on areas for improvement;
- involving pupils in marking and discussing their assessment performance, including the use of peer and self-evaluation; and
- providing quality feedback to the pupil, focusing on their performance and how they can improve their learning.

Figure 1 – shows how summative assessment can be used to improve learning.
Guidance on Subject Assessment at Key Stage 3

Identify next steps to improve learning

Teachers support pupils to identify a focus for development:
- Knowledge and Understanding
- Thinking Skills and Personal Capabilities
  - Cross-Curricular Skills

Pupils review and reflect
Teachers provide quality feedback to pupils
Teachers involve pupils in peer and self-assessment

Teachers use summative assessment to support learning
Teachers set challenging and motivating assessment tasks that pupils are familiar with
Teachers use summative assessment to support learning

Identify the stage pupils are at in their learning
Teachers support pupils to set personal learning targets;
plan ways to improve learning; and
monitor their progress.
Pupils should be involved in:
- Developing assessment criteria
- Creating mark schemes
- Marking and discussing pupil work

Figure 1
Using summative assessment to improve learning
Equity and fairness

The terms equity and fairness are often used interchangeably (Stobart, 2005). They refer to the idea that assessment should be inclusive and give pupils equal opportunities to demonstrate their performance and achievements (ibid.). An equitable or fair school assessment system is free from bias. It does not disadvantage pupils. A fair assessment should be open and transparent to all staff, pupils and parents.

The pupil population in Northern Ireland’s post-primary schools has become more diverse as more newcomer pupils attend local schools (DENI, 2009b). For many newcomer pupils, language may be a barrier to accessing the Northern Ireland Curriculum (ibid.). Schools must ensure their assessment systems are equitable, fair and free from systematic bias that would disadvantage pupils. This is in accordance with the key principles in DE School Improvement Policy (DENI, 2009a).

Validity

Validity is the extent to which assessment measures what it was intended to assess. At Key Stage 3 valid assessment is used to assess essential subject knowledge, understanding, skills and capabilities as set out in the minimum requirements and outcomes of the Northern Ireland Curriculum.

Reliability

Reliability is how much we can trust an assessment to give consistent information on a pupil's progress. For teacher-based assessment to be reliable, schools must ensure that variation in the standards that different teachers apply and potentially biased judgements are minimised. This requires professional discussion in and between subject departments about stretch, challenge and expectations. This is why internal standardisation, in and across departments, is an important process.

The problem of validity and reliability

A reliable assessment produces the same results on retest. If it is consistent in its methods and criteria, it will produce similar results with a similar cohort of students. Unfortunately, no assessment is completely valid or reliable. Even observational assessment is not completely valid as learners may over-perform or feel inhibited. Teachers' judgements are generally subjective and likely to have a significant margin of error. It is estimated that judgements are right only about 80 percent of the time. (For a more detailed discussion of this issue see Atherton, 2011).

To avoid this problem, teachers should use a variety of different approaches to assessment. They should not base judgements on a single assessment exercise. They should tell pupils and their parents that assessment outcomes are far from scientific and that small differences in percentage marks will have little real meaning. Consistent performance over time is what counts. Teachers should assess the progression of learning on this basis.
Section 2
Developing Quality Assessment Policy and Planning at a Whole-School Level
Section 2: Developing Quality Assessment Policy and Planning at a Whole-School Level

Schools need to plan and develop assessment policy at a whole-school level, taking into account relevant educational policies and guidance. A whole-school approach should involve teachers, pupils, parents and school governors. Schools should review their assessment policy and practice as part of their self-evaluation. They should prioritise areas for improvement in the school development plan. Schools need to ensure that they meet the Key Stage 3 statutory assessment requirements and promote a cross-curricular approach to assessing skills and capabilities.

Whole-school planning

Assessment is likely to be most effective when schools develop it as part of a consistent and coherent whole-school approach (Wiliam et al., 2004; TLRP, 2010). Assessment should be a focus for school self-evaluation (DENI, 2010a), school development planning (DENI, 2010b) and target setting (DENI, 2011). It should take account of policies and guidance, including:

- Count, Read: Succeed – A Strategy to Improve Outcomes in Literacy and Numeracy (DENI, 2011);
- Every School A Good School: A Policy for School Improvement (DENI, 2009a);
- Every School A Good School: Supporting Newcomer Pupils (DENI, 2009b);
- School Self-Evaluation (DENI, 2010a);
- School Development Planning (DENI, 2010b);
- Guide to Assessment (CCEA, 2011);
- Teaching: the Reflective Profession (GTCNI, 2011); and
- Performance Review and Staff Development (PRSD, RTU, 2005).

Effective whole-school planning helps to ensure that assessment is:

- manageable;
- appropriately aligned with the core business of teaching and learning (DENI, 2011); and
- able to monitor progression in:
  - Knowledge and Understanding;
  - Thinking Skills and Personal Capabilities; and
  - the Cross-Curricular Skills (CCS) of Communication, Using Mathematics and Using ICT.

Who to involve

All teaching staff should contribute to planning for assessment. A group with designated responsibility should lead the planning and development process. A senior member of staff (for example a vice principal, senior teacher or member of the school leadership team) should chair this group. The group should consult, where appropriate, with school governors, parents and pupils (DENI, 2010b). Ideally, all teachers should work collaboratively, discussing and sharing assessment practice to improve their capacity to contribute to quality assessment.

Schools should also involve pupils in developing assessments. This helps to ensure that they are more actively engaged in classroom assessment processes. Teachers should also inform parents of the school and subject assessment arrangements so that they understand how their child’s progress is measured. This helps to make school reports more meaningful to parents.

See also the following online case studies:
- Developing Assessment to Measure Progress and Improve Learning [Dromore High School]
- Planning and Developing an Integrated Approach to Assessment [St Louise’s Comprehensive College].
**Self-Evaluation and School Development Planning**

Assessment should be a focus of the school’s self-evaluation process (DENI, 2010a) and development planning. This ensures that the school implements planned actions effectively to improve assessment, resulting in improved outcomes for pupils.

Figure 2 shows the three key questions that schools can use to help inform development planning (ibid.). Schools can use the stages in self-evaluation and development planning processes shown in Figure 2 to plan a strategic whole-school approach to assessment. They can set targets for improvement in assessment over a three year period. This should make developing and implementing assessment more manageable.

**Figure 2**
**Assessment planning**
Section 2: Developing Quality Assessment Policy and Planning at a Whole-School Level

Assessment evaluation and review

At the start of the development process, schools should review their current assessment policy and practice to identify areas for improvement. It is important for everyone involved in assessment to have a clear understanding of the purpose of the review. The school may wish to consider a range of qualitative and quantitative data (DENI, 2010b), including:

- relevant school policy documents;
- subject schemes of work;
- guidance materials;
- assessment resources; and
- pupil information on progress and performance (including samples of pupil work).

The review may include gathering evidence from pupil, teacher and parent questionnaires and/or interviews to obtain their views on assessment. It should also consider other educational policy and guidance.

Audit of assessment practice

To identify strengths and areas for improvement in assessment, schools should conduct an audit of their Key Stage 3 assessment practice. They should cover the following areas:

- teacher views on the manageability of current processes;
- the range of assessment approaches being used across departments;
- the coherence and consistency of approaches;
- pupil and parent information and involvement;
- equity and fairness;
- the quality and frequency of continuing professional development; and
- evaluating the impact of current assessment practices on learner motivation and improvement.

Schools can conduct an audit by asking key questions (See Appendix 2) about their assessment practice in each of these areas. They can translate the questions into indicators to evaluate the quality of their assessment practice (see also Guide to Assessment, CCEA, 2011; DENI, 2010a). Schools can decide to focus on specific areas of assessment practice to evaluate how well each area meets the quality indicators for that aspect of assessment practice. The results of this evaluation will identify areas for improvement.

Prioritise areas for improvement

Schools should set manageable priorities to improve assessment (Figure 2). These should take into account other school improvement targets, including those for literacy and numeracy (DENI 2010a, 2010b). Schools should consider:

- how to build on their strengths in assessment;
- what resources they will need to achieve improvements; and
- how to achieve improvements in assessment.

Schools should consider the following aspects of assessment.
Statutory assessment requirements

At Key Stage 3 all assessment is teacher-based. Schools must assess and report on each pupil in each school year by the end of the summer term. Reports should include the results of assessment in:

- each of the Areas of Learning;
- the Cross-Curricular Skills; and
- Other Skills (Thinking Skills and Personal Capabilities).

At the end of Year 10, schools must assess and report (using the Levels of Progression) on pupils’ achievement in Communication, Using Mathematics (from 2012/2013) and Using ICT (from 2013/2014).

The Department of Education has delegated responsibility to schools for assessing and reporting on subject strands/Areas of Learning and the Other Skills (Thinking Skills and Personal Capabilities). This allows teachers the flexibility to develop assessments that meet their pupils’ needs and to support progression in the Cross-Curricular Skills of Communication, Using Mathematics and Using ICT.

Developing and assessing Cross-Curricular Skills

All subjects must give pupils opportunities to acquire and develop the Cross-Curricular Skills. However, not all subjects are required to assess each skill separately.

When planning for statutory assessment of the Cross-Curricular Skills, schools must identify the subjects best placed to provide evidence to make judgements about pupil progress in each year of Key Stage 3. This helps to avoid unnecessary overlap and duplication in assessment, while ensuring that all subjects support progression in these skills.

In accordance with the Department of Education strategy on literacy and numeracy, English (and in Irish-medium schools, Irish) and Mathematics departments should lead the assessment of Communication and Using Mathematics respectively. Other subjects should contribute to the assessment of Cross-Curricular Skills and feed back assessment information to English and Mathematics departments. This strategy should be part of a whole-school approach to planning for improvement in literacy and numeracy (ibid.). Subjects other than English and Mathematics can provide evidence of progress in the Cross-Curricular Skills.

We recommend an integrated approach to developing these skills alongside subject knowledge and understanding and the Thinking Skills and Personal Capabilities.

Teachers should set assessment opportunities in both familiar and unfamiliar contexts. This allows pupils to:

- apply their learning;
- demonstrate the breadth and depth of their knowledge and understanding; and
- show the range of Cross-Curricular Skills and Thinking Skills and Personal Capabilities that they have developed.

Using a range of assessment approaches

Throughout Years 8, 9 and 10, teachers should give pupils a range of challenging assessment opportunities. They should use a variety of assessment approaches that allow pupils to demonstrate what they know, understand, and can do. Using a single method of assessment is unlikely to give a comprehensive, or indeed adequate, profile of a pupil’s learning. Teachers should use a broad range of assessment approaches, for example:

- effective questioning;
- teacher observation;
- peer and self-assessment; and
- e-portfolios.
This is more likely to engage and motivate pupils. It provides a range of opportunities for pupils to demonstrate their potential and achieve success. Those who may not perform well in some types of assessment have the opportunity to demonstrate their knowledge and skills in others.

Coherence and consistency of challenge and expectations

Schools need to plan a coherent and consistent whole-school approach to assessment at Key Stage 3. This should be part of the teaching and learning process. This will help teachers to develop a clear understanding of the challenge, expectations and standards they need to set their pupils. These standards allow teachers to judge their pupils’ ability to demonstrate and apply subject knowledge and understanding, Thinking Skills and Personal Capabilities and the Cross-Curricular Skills. Understanding the challenge, expectations and standards required helps to ensure that teachers’ judgements are consistent and the information they gather from assessment is comparable.

Schools should plan to meet the requirements for moderation of the Cross-Curricular Skills at the end of Key Stage 3. This will help to ensure ‘that there is confidence in the system and appropriate accountability at all levels for the performance of the system’ (CCEA, 2011). The moderation process is designed to validate teacher judgements. It includes internal standardisation and common agreement of standards against the appropriate Levels of Progression and sampling of pupils’ work for external moderation.

A consistent approach to assessment is also important for pupils and parents. This helps to establish their trust and confidence in the assessment information that teachers give them.

Action to improve assessment

Schools should record priorities for improvement in their school development action plan (Figure 2) (DENI, 2010b). This can include details of:

- staff involved in the assessment and their roles and responsibilities;
- SMART targets and planned outcomes;
- actions and when they should be completed;
- resources, including finance, staff and materials;
- success criteria to evaluate outcomes; and
- processes to monitor and evaluate progress against quality indicators and evaluate success against outcomes.

Evaluating the impact of assessment

Schools need to plan how to monitor, evaluate and review their assessment policy and practice and how it improves learning outcomes (Figure 2). This should be a key focus of their ongoing self-evaluation process (DENI, 2010a).

Schools can judge their assessment policy and practice against their assessment quality indicators (CCEA, 2011; DENI, 2010a).

Schools can use assessment data to track, measure, record and compare pupil progress against learning outcomes in subjects across the Key Stage (CCEA, 2011). Class teachers’ day-to-day monitoring of assessment practice and pupil progress provides important feedback. Teachers should share this with colleagues regularly to improve the quality of teacher-based assessment.
Section 3
Developing Quality Assessment Practice in the Classroom
Schools should plan and develop an integrated approach to subject assessment. Subject knowledge, understanding, skills and capabilities are interrelated. Teachers need to ensure that pupils develop subject knowledge and understanding alongside skills and capabilities. Teachers need to plan progression and use assessment to measure pupils’ progression in each of these learning components. They can use an integrated progression framework to identify which aspects of learning to assess. They can also develop appropriate assessment tasks and criteria. Teachers can then judge pupil progress against these criteria. This allows them to provide quality feedback on how pupils can close the gap in their learning.

**See also the following online case studies:**
- Planning and Developing an Integrated Approach to Assessment [St Louise’s Comprehensive College]
- Developing Assessment to Measure Progress and Improve Learning [Dromore High School].

![Image of students in a science classroom.](image)

**Developing learning within subjects**

Every subject teacher must develop and assess pupils’ subject knowledge and understanding. They are also responsible for developing Thinking Skills and Personal Capabilities and the Cross-Curricular Skills of Communication, Using Mathematics and Using ICT.

Developing these components of learning in one subject may seem challenging, especially if they are treated separately. Teachers need to make clear the skills and capabilities that they are teaching. They should support pupils to appreciate how these skills and capabilities are linked to developing knowledge and understanding. Table 1 shows how these different components of learning are related and how teachers can support pupils to develop them.
### Table 1

**Components of learning: knowledge, understanding, skills and capabilities**

<table>
<thead>
<tr>
<th>Subject knowledge and understanding</th>
<th>Teachers help pupils to develop their knowledge and understanding by building on their previous learning. They introduce pupils to new ideas and concepts of increasing complexity. They increase the breadth of pupils’ knowledge by extending what pupils already know and encouraging them to apply their learning in unfamiliar contexts. Pupils’ development of knowledge and understanding depends on their cognitive and metacognitive abilities and thinking skills.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thinking Skills</td>
<td>Teachers convey information to develop pupils’ knowledge and understanding. They also help pupils to enquire and discover things for themselves. This teaches pupils to research/investigate and manage information from various sources, not just textbooks. Teachers help pupils to think about and use this information (some of which may be mathematical data) to solve problems and make decisions (sometimes creatively). This develops pupils’ thinking skills.</td>
</tr>
<tr>
<td>Cross-Curricular Skills</td>
<td>Teachers help pupils to communicate their learning: • orally, by answering questions, discussing ideas or making presentations in class; • in written form, using short sentences, paragraphs or extended pieces; • visually, in graphs, tables, charts etc. and by interpreting data (Using Mathematics); and • by Using ICT to research and manage the information and present it in various formats.</td>
</tr>
<tr>
<td>Personal Capabilities</td>
<td>Teachers may encourage pupils to: • work with others to develop their capability to collaborate; and • manage and structure their own learning. Developing personal capabilities supports pupils to become independent learners.</td>
</tr>
</tbody>
</table>

The curriculum requires teachers to develop and assess knowledge and understanding as well as skills and capabilities. To do this, teachers must plan carefully.
A step-by-step guide to planning for the development and assessment of knowledge, skills and capabilities

Table 2 and Table 3 illustrate how teachers can make the various components of learning more evident.

Table 2
Planning approach

<table>
<thead>
<tr>
<th>Step 1: Identify a topic and enquiry question</th>
<th>Teachers should identify an enquiry question as a focus for the work. This engages their pupils with the enquiry from the start. They should discuss the topic with their pupils and let them suggest enquiry questions. This gives pupils the opportunity to be more involved, interested and motivated. Alternatively, teachers could give their pupils some key questions to explore as part of learning about the topic. Teachers should link these questions to the minimum subject requirements and key elements.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 2: Identify essential knowledge, understanding and key concepts</td>
<td>Teachers often identify too much knowledge and understanding. They may neglect to emphasise the core subject ideas that pupils must engage with frequently to fully understand the subject and how to progress in it.</td>
</tr>
<tr>
<td>Step 3: Identify the thinking questions</td>
<td>This step focuses on thinking. Teachers should approach the topic from an enquiry perspective. They should identify questions that will help their pupils to understand the topic. They should decide in which order to ask the questions. As their pupils become more used to this approach, teachers should ask them to generate and sequence the questions.</td>
</tr>
<tr>
<td>Step 4: Identify what you intend to assess</td>
<td>Before they begin teaching, teachers should identify what they want to assess. They should clarify the knowledge, understanding, skills and capabilities their pupils must develop to complete the assessment successfully. Alternatively, teachers can let their pupils discuss and suggest how they would like to be assessed and what they would like to create to demonstrate their learning. This involves them more in the process, and the product, motivating them to engage in and complete it.</td>
</tr>
<tr>
<td>Step 5: Identify the Cross-Curricular Skill</td>
<td>The nature of the assessment task and outcome will help clarify which aspect of the Cross-Curricular Skills pupils are contributing to: oral, written, visual, graphic, ICT, etc.</td>
</tr>
</tbody>
</table>
Teachers could begin by creating an overall plan. They can write their plan on one page so they can see it as a whole. They could arrange the plan in columns (Table 3). This will give an overarching feel for the topic, allowing them to share it with colleagues or pupils. Here is an example:

### Table 3
**Planning template**

<table>
<thead>
<tr>
<th>Step 1</th>
<th>Enquiry question (linked to key element)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 2</td>
<td>Knowledge and understanding</td>
</tr>
<tr>
<td>Step 3</td>
<td>Thinking questions</td>
</tr>
<tr>
<td>Step 4</td>
<td>Assessment Task (Step 5 Cross-Curricular Skill)</td>
</tr>
</tbody>
</table>

### Planning for progression

Most subject teachers have little difficulty planning for progression in knowledge and understanding. Teaching more subject content is an obvious way to progress pupils’ knowledge and understanding. Progression in learning, however, does not necessarily mean teaching more. It is about moving pupils from shallow, surface learning to deep learning. Teachers should support pupils to become independent learners with the motivation to learn and develop a deeper understanding.

Teachers must motivate pupils to learn more, and at a deeper level, not just to improve performance but for the enjoyment of learning and understanding (Figure 3).

### Figure 3
**Moving from shallow to deep learning**

**Shallow surface learning (extrinsic motivation)**
Learning as memorising to retain information for a short period of time to be reproduced and then potentially forgotten

- Learning to retain and use information – but not necessarily being motivated by the learning

- Learning as acquiring knowledge, skills and methods – learning how to learn

- Learning as making sense and abstracting meaning (which requires thinking and often struggle and effort) to relate parts of the subject matter to other ideas/concepts within the subject and to the real world

**Deep Learning (intrinsic motivation)**
Learning as interpretation – coming to comprehend and understand the issue in a different way – creating deep meaning by struggling to re-interpret the knowledge

From Säljö, in Atherton, J S, (2011)
We often don’t emphasise the fact that learning should be a challenge. Learning should stretch pupils’ thinking and understanding. It should take them to the boundaries of their capability and beyond. Pupils should recognise that learning is often difficult. To achieve success, pupils must overcome difficulties through persistence and resilience. They should appreciate the importance of learning from their mistakes. They need to understand that finding learning difficult does not mean that they are unintelligent or incapable of understanding. It is an essential part of the learning process.

Table 4 illustrates how pupils can make progress in their learning. Using this process repeatedly across subjects builds on pupils’ previous experience. This enables them to make progress in their knowledge, skills and capabilities.

Table 4
Progression in learning

<table>
<thead>
<tr>
<th>Focus</th>
<th>Pupils should:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• focus on the specific task;</td>
</tr>
</tbody>
</table>

| Manage the information     | • ask a range of questions;           |
|                            | • access, select and judge what information/material is important and what is not; |

| Think Problem solve, decide, create | • consider different perspectives (and think creatively in new, original or non-standard ways, if required); |
|                                     | • be critical of the material and not accept things at face value; |
|                                     | • test ideas and potential approaches or solutions and persist until they find solutions; |
|                                     | • construct an appropriate response/argument as necessary and draw relevant conclusions; |

| Communicate                  | • structure their response to express what they have learned; and |

| Manage their own learning    | • review and improve their learning. |

This is an iterative process of progression. Teachers should give pupils tasks in increasingly difficult contexts with a progressively challenging range of information and concepts. Progression in learning is about pupils:

- knowing and understanding more – in quantity, breadth and depth;
- thinking more – researching, questioning, breaking ideas apart and piecing information together;
- communicating better – structuring responses in clearer and better ways; and
- becoming more capable – managing their own learning and working with others.

To make real progress, pupils need:

- clear development in all aspects of learning;
- the interest and motivation to learn;
- the confidence to try, struggle and even fail; and
- the ability to learn from experience.

Figure 4 illustrates the relationship between these essential components of teaching, learning and assessment.
Figure 4
The relationship between teaching, learning and assessment

Subject knowledge and understanding
(aligned to the aim, objectives and key elements of the Curriculum Framework)

Assessment for Learning

Active Enquiry and Thinking
Developing Thinking Skills, Cross-Curricular Skills and Personal Capabilities

Communication
Structuring and expressing outcomes through Communication, Using Mathematics and Using ICT

(questioning, peer and self-assessment, feedback and making improvements)
Figure 5 illustrates how subject knowledge and understanding are inseparable from Thinking Skills and Personal Capabilities and the Cross-Curricular Skills and their assessment.

**Figure 5**
**Key Stage 3: Skills and Capabilities**
Developing effective assessment tasks

Teachers can create effective assessment tasks to help them to develop a more integrated approach to assessment at Key Stage 3. They should design these tasks to enable pupils to demonstrate specific aspects of the knowledge, understanding and skills/capabilities they have gained during their learning experience. They will also need to develop tasks for assessing the Cross-Curricular Skills.

What makes an effective assessment task?

An effective assessment task should:

- be valid – it should assess what is intended from the subject scheme of work;
- allow pupils to demonstrate what they know, understand, and can do;
- allow pupils to demonstrate their thinking;
- allow pupils to communicate their understanding;
- include clear and meaningful instructions;
- be designed to match pupils’ capabilities, but also motivate, challenge and allow for differentiation in outcome; and
- have clear assessment criteria that teachers have either constructed, in discussion with their pupils, or shared with their pupils in advance so pupils know what they expect from them and what success looks like.

Structuring tasks around assessment criteria

Teachers must set appropriate and valid tasks that allow for differentiation and creative outcomes. These should have clear and explicit assessment criteria that they should share with their pupils before the assessment.

Assessment criteria should define what each pupil:

- is being measured against; and
- should be able to demonstrate as a result of their learning experience.

See also the following online case studies:

- Planning and Developing an Integrated Approach to Assessment (St Louise’s Comprehensive College)
- Developing Assessment to Measure Progress and Improve Learning (Dromore High School)
- Assessing Using Mathematics and Geography Knowledge and Understanding (St Cecilia’s College)
- Developing and Using Assessment Tasks in Local and Global Citizenship (Omagh High School)
- Using Teacher Observation to Assess TSPC, Knowledge and Understanding (Coláiste Feirste).

Teachers should set assessment criteria to:

- give their pupils clear information about what is expected, the focus of the assessment and what success will look like;
- provide feedback on what their pupils have done well, what they may have missed out and how to improve their learning; and
- enable them to make fair, sound and consistent judgements about pupil performance on the basis of assessment evidence.

Assessment criteria introduce objectivity, consistency and transparency to the assessment process. They help to:

- reduce potential teacher bias;
- make assessment fair and more reliable; and
- improve pupil learning.
Developing assessment criteria

Teachers may find the following five steps helpful when creating assessment criteria. They should set out the criteria and expectations in a similar way to the overall plan for the topic. This allows the assessment criteria to flow from the original planning and helps to show that the task is valid.

**Step 1:** Decide on an appropriate assessment task. Negotiate this with pupils at the start of the topic. This allows them to work towards the assessment gradually and develop the necessary skills to complete it successfully.

**Step 2:** Ask the class to help identify the relevant knowledge and understanding that pupils are expected to draw on and interpret.

**Step 3:** Ask the class to help identify the thinking processes or steps they will need to take to complete the task and how they could structure their response.

**Step 4:** With the class, discuss the features of Communication (including Using Mathematics or Using ICT, as appropriate) that pupils should demonstrate and which to focus on.

**Step 5:** Identify specific success criteria and weighting. With the class, discuss which elements of their response are most important and where they should focus their efforts.

Discuss the characteristics of an excellent, a good, and an under-developed response with pupils. If possible, give them examples. Table 5 illustrates the steps involved in developing assessment/success criteria. Teachers can use it as a template.

**Table 5**

**Developing assessment/success criteria**

<table>
<thead>
<tr>
<th>Step 1: Select the assessment task</th>
<th>Step 2</th>
<th>What range of knowledge and understanding should your pupils draw on?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Should they mention specific elements?</td>
</tr>
<tr>
<td>Step 3</td>
<td></td>
<td>What is the thinking focus?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Is there a thinking process that pupils should follow?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Would it be helpful to provide a structure or scaffold for pupils to follow (through sub-questions or a diagram)?</td>
</tr>
<tr>
<td>Step 4: Communication</td>
<td></td>
<td>What will successful communication look like?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Are specific aspects of a particular Cross-Curricular Skill being assessed?</td>
</tr>
</tbody>
</table>

**Step 5: Weighting and specific success criteria**

**An excellent response will display:**

- (Statements about the knowledge and understanding that the pupil is expected to demonstrate.)
- (Statements about the thinking that the pupil is expected to demonstrate.)
- (Statements about the communication skills that the pupil is expected to demonstrate.)

**A good response will display:**

- (Statements about the knowledge and understanding that the pupil is expected to demonstrate.)
- (Statements about the thinking that the pupil is expected to demonstrate.)
- (Statements about the communication skills that the pupil is expected to demonstrate.)

**An under-developed response will display:**

- (Statements about the knowledge and understanding that the pupil is expected to demonstrate.)
- (Statements about the thinking that the pupil is expected to demonstrate.)
- (Statements about the communication skills that the pupil is expected to demonstrate.)
Teachers should work in collaboration with their pupils to help set shared expectations of assessment criteria. Pupils can then use these assessment criteria to self-assess their learning and/or to peer assess others’ learning. This will help them to identify the characteristics of quality responses. Teachers can use the assessment criteria to provide detailed structured feedback. They should record what their pupils must do to improve. Teachers should also discuss the feedback with their pupils, so that they understand what they must do to improve.

### An integrated progression framework for assessing subject knowledge, understanding, skills and personal capabilities

Table 6 is a framework that helps teachers to decide on appropriate tasks and assessment criteria to use to assess subject knowledge and understanding alongside skills. Teachers can also use this framework to include personal capabilities. The tasks in Table 6 increase in complexity. A Type A task is highly structured, set in a familiar context and has a limited number of steps. A Type E task is abstract, set in an unfamiliar context, and open-ended.

The table shows that, in increasingly complex tasks, pupils must demonstrate greater command of Thinking Skills and more independent learning.

**Progression in:**

- **subject knowledge and understanding**

Row 2 of Table 6 illustrates progression in the breadth and depth of subject learning and the knowledge and understanding required for each type of task.

- **Thinking Skills**
  
  Rows 3 and 4 of the table chart progression in:
  - Managing Information; and
  - Thinking, Problem Solving and Decision Making.

- **Communication Skills**
  
  All tasks will involve pupils using aspects of their Communication Skills such as:
  - contributing to discussion;
  - asking and responding to questions;
  - presenting their findings;
  - finding and selecting information; and
  - communicating their ideas/findings in writing.

The tasks may give teachers opportunities to assess some of these skills. They could, for example, plan a task to include assessing aspects of a pupil’s writing skills. Row 5, in Table 6, illustrates how a pupil could demonstrate progression in writing.

The assessment criteria for writing are taken from Communication Levels of Progression. Teachers could plan to assess aspects of Using Mathematics or Using ICT as well as subject knowledge and understanding and Thinking Skills and Personal Capabilities.
### Table 6
**Integrated Progression Framework**

#### Increasingly complex task

<table>
<thead>
<tr>
<th></th>
<th>Nature of task</th>
<th>Task Type A</th>
<th>Task Type B</th>
<th>Task Type C</th>
<th>Task Type D</th>
<th>Task Type E</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>How is the task structured? What is the context/situation?</td>
<td>highly structured; familiar and accessible contexts/situations; and a limited number of steps.</td>
<td>less structured; familiar and accessible contexts/situations; and more steps.</td>
<td>some structure to support more open-ended responses; familiar and unfamiliar contexts/situations; and an increasing number of steps.</td>
<td>increasingly open-ended; unfamiliar contexts/situations; and multi-dimensional tasks.</td>
<td>increasingly abstract and open-ended; unfamiliar contexts/situations; unfamiliar demands; and multi-dimensional.</td>
</tr>
</tbody>
</table>

#### Increasingly independent learning

<table>
<thead>
<tr>
<th></th>
<th>Knowledge and understanding</th>
<th>Across a range of tasks, pupils demonstrate the ability to:</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>How might pupils demonstrate breadth and depth of knowledge and understanding?</td>
<td>recall, state, identify, recognise and describe mainly basic factual subject knowledge.</td>
</tr>
</tbody>
</table>

#### Increasingly broader and deeper understanding
### Progression in Thinking Skills

#### 3 Managing Information

Across a range of tasks pupils demonstrate the ability to:

<table>
<thead>
<tr>
<th>Task Type A</th>
<th>Task Type B</th>
<th>Task Type C</th>
<th>Task Type D</th>
<th>Task Type E</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Questioning and Planning</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ask basic questions; identify key words from information; and consider options when planning.</td>
<td>ask relevant questions; and consider and choose appropriate options when planning.</td>
<td>identify a range of appropriate, focused questions to ask and explore; and establish an appropriate sequence for investigations or to complete tasks.</td>
<td>identify, ask and explore probing questions; and establish an appropriate sequence for an investigation or to complete tasks.</td>
<td>ask and work through critical questions; and produce their own plan for an investigation or to complete tasks.</td>
</tr>
</tbody>
</table>

| Accessing and Selecting and Evaluating Sources | | | | |
| select useful sources, materials and equipment. | select appropriate tools; use more than one source of information; select relevant information; and consider the usefulness of the information. | use a range of information and sources; adapt and acknowledge sources; compare and contrast information; and evaluate the usefulness and reliability of the information. | use complex information from a range of sources; give some reasons for their choice; adapt and acknowledge sources effectively; evaluate sources of information; and identify weaknesses or gaps in the information. | identify limitations in information; discriminate between sources; identify sound, robust evidence; combine information from different sources; and authenticate and justify choice and quote sources accurately. |

| Recording and Adapting Information | | | | |
| record information in a relevant format for their own use. | adapt and record information in different formats for their own and others’ use. | record and present information in a range of formats to suit audience and purpose. | record and present information in a logical sequence to convey meaning to suit audience and purpose. | process recorded information so as to communicate meaning, following accepted conventions. |
## Progression in Thinking Skills

### Problem Solving and Decision Making

How might pupils demonstrate progression in their problem-solving and decision-making skills?

<table>
<thead>
<tr>
<th>Task Type</th>
<th>Task Type A</th>
<th>Task Type B</th>
<th>Task Type C</th>
<th>Task Type D</th>
<th>Task Type E</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Seeing Relationships and Patterns</strong></td>
<td>identify and describe obvious patterns and relationships, for example characteristics, comparisons, connections, pros/cons, ideas and solutions.</td>
<td>identify and explain obvious patterns and relationships; compare and contrast information; and explain their findings.</td>
<td>use trends and patterns to make generalisations and predictions to explain how different parts of a process/cycle/event are linked; explain, compare and contrast in greater detail; and weigh up pros and cons.</td>
<td>explain trends, patterns and relationships; make specific predictions based on general trends, patterns and relationships; and understand how parts of a system or process are related to the whole.</td>
<td>explain complex inter-relationships between different factors/variables and associated patterns; and assess the relative significance of these factors/variables.</td>
</tr>
<tr>
<td><strong>Developing a Line of Reasoning</strong></td>
<td>provide simple reasons for their actions or choices; support their answer with simple reference to text; and provide a reasonable hypothesis as a starting point for an investigation.</td>
<td>provide some reasons to justify their ideas/opinions/arguments; and support their views with specific reference to text.</td>
<td>give reasons why something is happening; link cause and effect; use specific evidence to support an argument; draw appropriate conclusions; and support and justify their perspective/argument with reference to evidence.</td>
<td>explain causal relationships; explain and predict the consequences/impact of change; and explain, support and justify their thinking/position/conclusion with a sound, well-reasoned rationale.</td>
<td>explain how one set of actions can affect/are affected by another; challenge assumptions; make judgements about the most likely explanations; and draw conclusions based on sound and robust evidence.</td>
</tr>
</tbody>
</table>
### Progression in Thinking Skills

#### Problem Solving and Decision Making

Below are examples of how pupils demonstrate progression in their problem-solving and decision-making skills:

<table>
<thead>
<tr>
<th>How might pupils demonstrate progression in their problem-solving and decision-making skills?</th>
<th>Task Type A</th>
<th>Task Type B</th>
<th>Task Type C</th>
<th>Task Type D</th>
<th>Task Type E</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Examining Evidence and Analysing Multiple Perspectives</strong></td>
<td>pose questions about the reliability and usefulness of the evidence; and recognise another view about an issue and give reasons for holding that view.</td>
<td>consider the usefulness and reliability of information; recognise that information can be interpreted in different ways; recognise alternative perspectives on issues and how this can lead to bias in information and evidence; and identify fact from opinion.</td>
<td>recognise a range of different interpretations; identify stereotyping and propaganda; appreciate difference of views held; and develop an opinion.</td>
<td>understand key reasons why information is presented and interpreted in different ways; understand how and why information may be manipulated to serve certain agendas; and form opinions, giving due consideration to evidence.</td>
<td>weigh up strengths and weaknesses of information, evidence and arguments; assess the relative merits of different viewpoints; suggest ways that conflicts of interest might be resolved; and expand on opinions.</td>
</tr>
<tr>
<td><strong>Making Decisions and Problem Solving</strong></td>
<td>clarify a problem, identify some solutions and give some pros and cons for each.</td>
<td>explore alternative solutions to an issue or problem and explain the main pros and cons for each.</td>
<td>explore a range of viable options and alternatives; and weigh up the main pros and cons for each.</td>
<td>identify key options/alternatives to explore; and examine alternatives/options and make decisions about the preferred option/alternative(s).</td>
<td>explore and evaluate a range of options/alternatives; and draw conclusions about preferred option/alternative based on justified and well-informed decisions.</td>
</tr>
</tbody>
</table>
## Progression in Communication Skills

### Writing

<table>
<thead>
<tr>
<th>Task Type A</th>
<th>Task Type B</th>
<th>Task Type C</th>
<th>Task Type D</th>
<th>Task Type E</th>
</tr>
</thead>
<tbody>
<tr>
<td>talk about and plan their writing; make improvements to their writing; express thoughts, feelings, ideas and opinions; structure and sequence their writing; provide supporting detail using an expanding vocabulary; use the form appropriately; start sentences in different ways; use basic punctuation and grammar accurately; spell and write frequently used and topic words correctly; and produce handwriting that is accurately formed and consistent in size.</td>
<td>plan and make use of planning; check writing to make improvements in accuracy and meaning; express thoughts, feelings, ideas and opinions, giving reasons when appropriate; structure writing, including using paragraphs; express meaning clearly, using an appropriate vocabulary and level of detail; choose from and use a range of forms, as appropriate; vary word order and use linking words in sentences; use a range of punctuation accurately; and use accurate grammar and spelling on most occasions.</td>
<td>redraft to improve accuracy and meaning; use precise vocabulary to convey thoughts, ideas, relevant information and to justify opinions; structure writing logically and coherently; match writing to purpose and audience; present information effectively, using a formal style where appropriate; create sentence structures that help to convey meaning; use a range of punctuation consistently and accurately; and use accurate grammar and spelling.</td>
<td>redraft writing for effect; communicate ideas, information and opinions in a sustained and developed way; make use of information and evidence to support ideas and opinions; organise and present writing for deliberate effect; use appropriate style and tone; create sentence structures that convey meaning clearly; and use punctuation for effect.</td>
<td>make discriminating choices about language in order to create impact; communicate complex ideas and opinions in a sustained and developed way; make effective use of information and evidence to support their ideas, analyses and conclusions; match style, tone and presentation to create an impact; create complex sentences for impact; and use punctuation for effect.</td>
</tr>
</tbody>
</table>
Teachers can use this framework to help develop an integrated approach to assessment.

Teachers can design tasks to assess subjects in an integrated and holistic way, by using this framework as well as:

- subject Thinking Skills and Personal Capabilities Progression Frameworks (CCEA, 2009b);
- the Think Pack; and
- the Cross-Curricular Skills of Communication, Using Mathematics and Using ICT with reference to the Levels of Progression.

Sharing this type of assessment criteria with others will ensure a common approach to assessment throughout the school. This allows teachers to judge the comparability of challenge and the quality of pupil work across departments.

Making judgements about pupil performance

Schools and teachers can use assessment outcomes to make judgements about pupils’ performance in subjects in the three ways outlined below.

- **Norm-referencing**
  This is a competitive way of marking and ordering outcomes to compare pupils’ performance against that of their peers. It involves ranking pupils by fitting their outcomes to a pre-determined distribution for awarding grades (for example, the top 20 percent receive ‘A’s, the next 10 percent ‘B’s and so on). Its main purpose is to classify pupils, for example to identify high and low achievers or to place pupils in ability groupings.

  Teachers should be aware that the quality associated with each percentage/grade could vary from class to class, subject to subject and school to school.

- **Criterion-referencing**
  Criterion-referencing assesses pupils against fixed criteria to determine how well they have mastered particular knowledge, understanding and skills. Assessment against fixed criteria can be inherently fairer, as long as the criteria are valid, reliable and determined in advance. However, in practice, teachers may sometimes award results on the basis of a notional percentage of learners achieving certain grades or levels, leading to subjective norm-referencing.

- **Ipsative assessment**
  This involves assessing a pupil against their ‘personal best’ performance. This may be more relevant to performance coaching and special needs education.

Using assessment information to improve learning

One of the key purposes of assessment is to improve learning. To help pupils to do this, teachers need to give pupils regular and helpful written and oral feedback. Research shows that pupils tend to only look at the grade and ignore the comments (Atherton, 2011). Black and Wiliam (1998) refer to this as the ego factor.

Pupils who have done well congratulate themselves, but do not learn from the feedback. Pupils who have done less well are deflated and may switch off.
Research shows that giving pupils constructive feedback without marks or grades is more likely to lead to improvement in their learning. This message is a challenge for teachers and schools that rely on numerical or grade-related marking and for pupils and parents who like to know their position in a hierarchy. However once pupils accept the idea of comment and feedback, and parents know the benefits of this approach, it is usually accepted. Teachers should give pupils specific feedback on how to improve their learning. It should highlight how much effort pupils have put into their work, as this is an important factor in making improvement.

Teachers can also give relative summative feedback when using comment only marking and feedback. Schools with informed target setting should give pupils challenging, but achievable, targets for self-improvement against their own best performance. Teachers should tell parents whether their child has underachieved, reached, or surpassed expectations. They should also tell parents where their child’s achievements are in relation to the rest of the class/year.

By involving pupils in deconstructing and critiquing samples of work, teachers can show them the standards they should aim for. This challenges pupils to keep improving their own performance against the criteria teachers have shared with them.

**Quality feedback to pupils**

Research shows that giving pupils frequent quality feedback with opportunities to review and discuss their work, can help them to improve their learning (Black et al., 2003; Black et al., 2010; Black et al., 2011; Harlen, 2005). Quality feedback is a key AfL strategy (CCEA, 2009a). Teachers should use it in classroom practice and alongside other AfL approaches such as scaffolding reflection and effective questioning.

Quality feedback is about giving pupils frequent, focused, meaningful information about their work and how to improve it. This feedback may be oral or written, but it must be constructive and support pupils to ‘close the gap’ in their learning (Sadler, 1989).

*See also the following online case study:*
- **Using Effective Questioning in Spanish** (St Patrick’s College, Maghera).

Feedback should help pupils to:

- understand what stage they are at in their learning;
- know what they should aim for; and
- identify the next steps to take to improve their learning.

Quality feedback involves giving pupils time to review, reflect and discuss their learning. Teachers should support pupils to set their own targets for improvement. This is part of the process of scaffolding reflection (CCEA, 2009a). Teachers can also use effective questioning techniques (ibid.) when discussing pupil learning. This could include asking pupils focused questions to prompt them to think about their learning and their thinking processes (Table 7).
Pupils from St Patrick’s College giving oral presentations in Spanish to their class
Table 7
Examples of prompt questions

<table>
<thead>
<tr>
<th>Purpose of Question</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>To clarify pupils’ thinking/reasoning</td>
<td>What do you mean when you say...?</td>
</tr>
<tr>
<td></td>
<td>Can you give me some examples of what you mean?</td>
</tr>
<tr>
<td></td>
<td>What was your thinking behind your idea/approach?</td>
</tr>
<tr>
<td></td>
<td>What were your reasons for your approach?</td>
</tr>
<tr>
<td></td>
<td>Why do you think that?</td>
</tr>
<tr>
<td></td>
<td>How did you reach that conclusion?</td>
</tr>
<tr>
<td>To evaluate pupils’ learning experience</td>
<td>What parts of the activity did you do well?</td>
</tr>
<tr>
<td></td>
<td>Why do you think you did well?</td>
</tr>
<tr>
<td></td>
<td>What parts of the activity did you find difficult?</td>
</tr>
<tr>
<td></td>
<td>Why did you find this difficult?</td>
</tr>
<tr>
<td></td>
<td>What approach did you use?</td>
</tr>
<tr>
<td></td>
<td>What other approaches did you consider?</td>
</tr>
<tr>
<td>To identify pupils’ new learning</td>
<td>What have you learned from this activity that is new?</td>
</tr>
<tr>
<td></td>
<td>How will this learning be helpful next time?</td>
</tr>
<tr>
<td>To encourage pupils to think about the next steps</td>
<td>What will you do to help to improve your skills/capabilities?</td>
</tr>
<tr>
<td></td>
<td>What will you do to help to improve your understanding about ...?</td>
</tr>
<tr>
<td></td>
<td>What would happen if you did things differently?</td>
</tr>
</tbody>
</table>

Quality feedback should:
- be specific to the pupil;
- focus on learning;
- be linked to success/assessment criteria;
- be accurate and make sense to pupils;
- give pupils clear guidance on how to improve their learning; and
- enable pupils to act to improve their learning.

Most feedback is verbal and informal. Teachers can also give pupils written feedback when marking their work. This involves annotating pupil work and writing meaningful comments. They might find the following five steps helpful when giving pupils structured feedback:
- highlight success by identifying some areas where the pupil has succeeded;
- identify areas for improvement;
- suggest ways to make improvements by providing constructive comments and examples of how they could do this;
- give the pupil time to review their work and make improvements; and
- review and discuss the changes with the pupil.
Section 4
Engaging Pupils in Assessing their Own Learning
Section 4: Engaging Pupils in Assessing their Own Learning

Peer and self-assessment, along with other assessment methods, should be an integral part of a whole-school approach to developing quality assessment practice in the classroom (Chappuis and Stiggins, 2008). Teachers need to foster a supportive classroom culture that encourages pupils to engage in a range of peer and self-assessment strategies. This will help pupils to identify gaps in their learning, set targets, and identify the next steps to improve learning.

Peer and self-assessment

Peer assessment involves pupils assessing each other’s work and giving constructive feedback. Self-assessment involves pupils making judgements about their own learning and achievement and deciding how to progress in their learning.

Peer and self-assessment focuses on engaging pupils in reviewing and discussing the quality of their work and reflecting on how to improve it. Actively involving pupils in assessing their own learning through peer and self-assessment can:

- improve learning;
- reduce achievement gaps for low achievers and underachievers; and
- support pupils to become independent learners (Sebba et al., 2008).

Peer and self-assessment supports and reflects a constructivist view of learning. This view suggests that pupils learn by constructing their own meaning, based on their experiences and social interactions with others (Vygotsky, 1978). Engaging pupils in assessing their own learning gives them a better understanding of how and what they are learning. It allows them to identify and close gaps in their learning. Peer and self-assessment support pupils to develop their critical thinking skills and metacognitive (thinking about the thinking) abilities. This helps them to plan, monitor, redirect and evaluate how they think and promotes deep learning (Seeba et al., 2008).

See also the following online case studies:
- Peer and Self-Assessment in Physical Education (Ashfield Girls’ High School)
- Using e-Portfolios in Technology and Design for Peer and Self-Assessment (Sullivan Upper School).

Pupils from Ashfield Girls’ High School participating in a peer assessment activity
Developing peer and self-assessment practices and strategies in the classroom

Teachers should plan peer and self-assessment opportunities to complement teaching and learning and other assessment methods. They should foster a supportive classroom culture, by encouraging their pupils to:

- take part in classroom dialogue about thinking and learning;
- respect and take into account pupils’ individual differences, for example background, interests, abilities and experiences, and how these can affect learning;
- highlight what they do not understand and view their mistakes as learning opportunities;
- be resilient and persistent to overcome challenges to their learning;
- take part in group work to build relationships based on co-operation, respect and trust; and
- respect each other’s views and accept, respond and act on constructive criticism.

Teachers need to engage pupils in a range of peer and self-assessment strategies. This helps them to become familiar with the processes involved and to build their skills and capacity for assessing their own and their peers’ work.

Peer and self-assessment succeeds when pupils clearly understand their purpose and processes and have the motivation and commitment to take steps to improve their learning (Black and Wiliam, 1998). Pupils must be able to:

- determine what stage they are at in their learning;
- identify gaps in their learning;
- set targets for improvement; and
- know what they need to do to close gaps in their learning.
To help pupils determine what stage they are at and to identify gaps in their learning, teachers should:

- promote peer and self-assessment as an intrinsic part of the learning process;
- actively involve pupils in deciding how best to assess their knowledge, understanding and skills;
- actively involve pupils in developing the assessment criteria;
- ensure pupils understand the criteria for quality work so that they can make fair judgements about their own and others’ work;
- support pupils to acknowledge their strengths and weaknesses and assume greater responsibility for their own learning;
- encourage pupils to ask meaningful questions about the quality of their own and others’ work; and
- provide timely quality feedback to pupils about their learning.

To help pupils to set targets to improve their learning, teachers should:

- define good work so that pupils understand what they are aiming to achieve;
- show exemplars of good work and expected standards;
- engage pupils in critiquing the exemplars to draw out criteria;
- encourage self-reflection by allowing pupils time to respond to feedback;
- clearly illustrate examples of learning targets that pupils can model;
- encourage pupils to set realistic, time-limited learning targets;
- encourage pupils to record, monitor and regularly review their learning targets and progress; and
- work with pupils to discuss and review their targets.

Supporting pupils to assess their own learning enables teachers to understand their pupils’ learning capabilities and individual learning needs. They can use this knowledge to develop strategies to help their pupils to improve their learning.

To help pupils to determine the steps to take to improve their learning, teachers can:

- encourage pupils to discuss and ask questions about how they could improve their learning;
- support pupils to explore and identify different ways of improving their work;
- encourage them to think about what they might have done differently;
- provide explicit feedback about what was good, where effort was made and potential areas for improvement or greater effort;
- help pupils to plan and manage current and future work to meet learning targets; and
- help them to become aware of how different learning approaches, strategies and scaffolds may improve their thinking and learning.

For examples of peer and self-assessment strategies, and how to use these in the classroom, see Appendix 3. These examples illustrate how the learning benefits the pupil and how these strategies can support them to develop their skills and capabilities.
Section 5
Developing a Shared Understanding of Assessment Standards
Section 5: Developing a Shared Understanding of Assessment Standards

Teachers need to have a shared understanding of assessment standards. This helps to ensure consistency in setting standards, judging pupil performance, and measuring progression in learning. As part of their continuous professional development, teachers should have opportunities to engage in discussion about assessment and standards by participating in, for example, departmental and interdepartmental moderation. Teachers need to illustrate standards for pupils and clearly explain what they must demonstrate to achieve them. Teachers should also share standards with parents to help them to understand how their child is progressing.

See also the following online case studies:
- Planning and Developing an Integrated Approach to Assessment (St Louise’s Comprehensive College)
- Developing Assessment to Measure Progress and Improve Learning (Dromore High School)
- Assessing Using Mathematics and Geography Knowledge and Understanding (St Cecilia’s College)
- Developing and Using Assessment Tasks in Local and Global Citizenship (Omagh High School).

Assessment standards

Individual teachers, subject departments and the whole school need to develop a shared understanding of assessment standards. This includes the breadth, depth and quality expected of pupils’ work in terms of knowledge, understanding, skills and capabilities in Years 8, 9 and 10.

To develop agreed standards and improve learning, teachers must engage in the teaching, learning and assessment processes outlined in Section 3. They should also engage in professional dialogue to:

- develop a common understanding of school and departmental assessment standards;
- provide clear performance expectations for pupils;
- set challenging learning targets for pupils;
- make consistent judgements when applying and setting subject assessment standards;
- develop an understanding of what constitutes good pupil work;
- monitor progress to identify low achievement and underachievement; and
- improve learning outcomes and support progression by planning teaching and learning to meet the individual needs of each pupil.

The Levels of Progression describe assessment standards for the Cross-Curricular Skills. Subject progress maps can be used to define assessment criteria and set standards for Thinking Skills and Personal Capabilities. Teachers can combine both these sets of assessment criteria with those for subject knowledge and understanding to create holistic standards to judge pupils’ performance against.

Internal Moderation at Key Stage 3

To develop a shared understanding of assessment standards, teachers should have opportunities to work collaboratively. They should engage in professional dialogue about the quality demonstrated in a range of examples of pupil subject work, taking account of:

- the level of challenge in tasks;
- the knowledge, understanding, thinking skills and capabilities demonstrated in response to the challenge; and
- the ways that pupils express their knowledge, understanding and thinking, whether through written, oral or visual Communication, Using Mathematics, and/or Using ICT.

Schools can use departmental and inter-departmental moderation to quality assure the assessment process. This provides opportunities for continuous professional development. It also helps teachers to develop consistency in their judgements by agreeing criteria and applying shared standards in departments and across the school. Teachers should select and review samples of pupil work. By discussing these with their colleagues, they should reach an agreement about assessment standards. This is particularly important when making formal judgements about the levels pupils are working at in the Cross-Curricular Skills.
As part of their assessment policy and practice, schools should help to ensure that teachers develop a shared understanding of assessment standards by:

- providing regular opportunities for internal standardisation in and across departments as part of the school’s staff development programme;
- supporting teachers to gather selective evidence of pupil work that illustrates standards; and
- building a bank of examples of pupils’ work to exemplify standards.

The process of internal moderation involves teachers:

- selecting examples of pupil work that illustrate the range of assessment standards;
- agreeing assessment criteria and marking conventions before reviewing the work;
- reviewing the examples against the agreed assessment criteria;
- discussing their initial judgements with colleagues and identifying areas where views about standards may differ;
- identifying strengths and weaknesses in pupil performances;
- reaching consensus about assessment standards; and
- using the insights they gain to improve teaching, learning and assessment practices.

Sharing assessment standards with pupils and parents

Internal moderation allows departments to agree:

- expected standards of pupil performance; and
- the skills, capabilities, knowledge and understanding a pupil must demonstrate to achieve a certain standard.

Subject teachers should give pupils examples of work that illustrates the expected standards. This allows pupils to discuss what they need to do to achieve these standards.

Teachers should share their understanding of standards with parents. This helps parents to appreciate how their child is progressing and to support their learning.

To help parents understand assessment standards, teachers could:

- explain what assessment standards are and how they use them;
- explain the expected standards for the subject;
- provide examples of their child’s work, to illustrate the standard they are working at;
- identify strengths and a focus for development; and
- provide concrete examples of what they can do to help their child to make improvements in their learning.
Section 6
Effective Use of Data for Pupil Tracking and School Improvement
To manage and use assessment data effectively, schools should have a whole-school approach. Using data effectively can enhance teaching and learning, improve learning outcomes and contribute to raising standards. Schools need to establish manageable processes and procedures for gathering and recording assessment data and monitoring and tracking pupil progress against individual and class targets. This will help schools to identify low achievement and underachievement, enabling them to put intervention strategies in place to support pupils to improve their learning. School assessment data is also important for benchmarking performance against similar schools and for internal subject comparisons.

See also the following online case studies:
- Planning and Developing an Integrated Approach to Assessment (St Louise’s Comprehensive College)
- Developing Assessment to Measure Progress and Improve Learning (Dromore High School)
- Assessing Using Mathematics and Geography Knowledge and Understanding (St Cecilia’s College)
- Using Effective Questioning in Spanish (St Patrick’s College, Maghera).

Using assessment data effectively

The Department of Education’s school improvement policy (DENI, 2009a) and Count, Read: Succeed A Strategy to Improve Outcomes in Literacy and Numeracy (DENI, 2011) both recommend using assessment data effectively to inform teaching and learning at whole-school and classroom level. Teachers should use assessment data to:

- enhance teaching and learning;
- promote improved outcomes for pupils; and
- raise standards.

Both publications recommend using assessment data and other information at system, whole-school, departmental, and classroom levels.

Teachers can use the assessment data to inform self-evaluation and development planning that focuses on improving standards of literacy and numeracy (ibid.).

Schools can use computer-based information management systems, such as the Schools Information Management System (SIMS) and Assessment Manager, to record and analyse assessment data. This can help schools to use assessment data more effectively.

Schools must establish manageable processes and procedures to use assessment data effectively. These will enable senior leaders, heads of department and teachers to regularly gather and record assessment data from a range of sources linked to other school information. Schools should use this assessment data to:

- communicate and share assessment information;
- monitor and track pupil performance and progress;
- analyse and interpret assessment outcomes;
- establish targets for progression and improvement;
- identify low achievement and underachievement;
- plan and inform teaching and learning;
- develop intervention strategies to support learning; and
- help improve learning outcomes for all pupils.
Guidance on Subject Assessment at Key Stage 3

Gathering and recording assessment data

The extent to which schools can use assessment data to improve learning outcomes depends on collecting the right type and quality of data. Before gathering and recording assessment information, schools need to ask:

- Is the information appropriate for this purpose?
- What will we use the assessment evidence for?
- Could we use assessment evidence already available for this purpose?
- Do we need to gather other assessment evidence?
- Is the assessment evidence dependable?
- How will we gather and record the assessment information?
- When and how often will we gather and record the assessment evidence?
- Who is responsible for gathering, recording and managing the data?

Tracking and monitoring pupil progression

To track and monitor pupil progression, schools can use:

- classroom observation;
- ongoing formative assessment;
- planned departmental periodic assessments;
- internal subject tests; and
- standardised tests and examinations, where available.

This enables schools to monitor progress and identify low achievement and underachievement.

Schools can use external data to target pupils who may be falling short of their potential. External data can include results from standardised assessment such as Middle Years Information Systems (MidYIS), Cognitive Ability Tests (CATs) and Progression in English (PIE) and Progression in Mathematics (PIMs).

Identifying low achieving and underachieving pupils

Schools can use Assessment Manager to record assessment data at departmental level. This provides a picture of pupil performance within and across all Key Stage 3 subjects. Schools can analyse the assessment data for trends, for example to identify:

- patterns of consistent underperformance in individuals or groups of pupils; and
- low achievement and underachievement.

Many factors are not directly measurable. These rely on teacher observation and on other school data to indicate low achievement and underachievement (Montgomery, 1996; Underwood et al., 2009).

Teachers can also use their knowledge of pupils and their professional judgement to complement assessment information. They should consider other factors associated with underachievement such as:

- personal/individual differences and behaviours;
- behavioural and emotional factors;
- socio-economic and cultural factors;
- Special Educational Needs;
- attendance figures;
- persistent absenteeism;
- student mobility; or
- communication skills.

Detailed analysis of assessment and other data can help to compare the performance of different groups, for example comparing the performance of pupils receiving free school meals with the class or year norm. Schools can use this data to identify underachievement in particular groups.
Section 6: Effective Use of Data for Pupil Tracking and School Improvement

**Intervention strategies**

Analysing assessment data together with teachers’ observation and discussion with pupils can help to identify aspects of learning that pupils find difficult and that act as barriers to their learning.

If teachers identify a pupil as underachieving in areas of literacy or numeracy, they should follow the guidance in *Count, Read: Succeed A Strategy to Improve Outcomes in Literacy and Numeracy*. Intervention strategies include:

- additional provision for specific areas of subject knowledge and understanding;
- a focus on developing specific skills such as self management and study skills;
- mentoring support;
- targeted support to tackle specific problems, for example improving concentration, self-esteem and self-efficacy; and
- pastoral support for those experiencing behavioural or emotional problems.

Teachers should continue to closely monitor the pupil when learning support is in place. This enables them to measure any improvement and evaluate the ‘added value’ of the support.

**Target setting**

Target setting takes place at three levels. At whole-school level, senior leaders and heads of departments set targets by considering the ability of the cohort and their previous performance. These targets may include a specific focus on improving literacy, numeracy or ICT. At departmental level, heads of department and individual teachers set targets by considering the ability of the class and their previous performance. At individual level, the teacher and pupil set targets by considering the pupil’s learning needs.

**Benchmarking**

Whole-school and departmental target setting may be numerical and will draw on:

- external benchmarking data, provided by the Department of Education and the Education and Library Boards, that allows schools to compare themselves with other similar schools;
- internal benchmarking data, provided by senior management, that allows individual departments to consider how related departments are performing and where they might collaborate to improve specific aspects of teaching and learning.

**Table 8**

DENI Key Stage 3 Targets for Literacy and Numeracy

<table>
<thead>
<tr>
<th>Key Stage 3</th>
<th>Milestones</th>
<th>Long term target</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Percentage of pupils at expected level</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2011/12</td>
<td>2014/15</td>
</tr>
<tr>
<td>Communication, in English</td>
<td>81</td>
<td>83</td>
</tr>
<tr>
<td>Communication, in Irish for pupils educated through the medium of Irish</td>
<td>85+</td>
<td>85+</td>
</tr>
<tr>
<td>*Maths</td>
<td>80</td>
<td>82</td>
</tr>
</tbody>
</table>

Source: *Count, Read: Succeed* (DENI, 2011)

*Using Mathematics 2014/15; 2019/20
Class and individual target setting

Individual target setting is qualitative. It is based on teacher insights into individual pupils. It focuses on specific areas and strategies for improving a pupil’s own previous best performance.

These targets must be as motivational as possible. They should refer to specific challenging but achievable aspects of knowledge, understanding, skills and capabilities. These should include the Cross-Curricular Skills. Teachers should base the targets on their awareness of the standards expected in each subject in each year of Key Stage 3.

At the start of the year, teachers should work with individual pupils and the whole class to help them to identify and set their own learning targets. Teachers should take into account their knowledge of the pupil’s ability and prior attainment. They should monitor and track pupil progress against short (weekly, monthly), medium (termly) and longer term targets (yearly and end of Key Stage). This allows them to assess each pupil's progress against specific learning goals.
Section 7
Effective Reporting
Schools need to plan reporting alongside assessment. They should establish efficient and manageable reporting processes and procedures. The annual report to parents should provide information about their child’s progress and achievements in all aspects of their learning.

### The purpose of reporting

Reporting should support and improve learning. It must provide useful information to pupils and their parents. Pupils should know:

- what they have achieved;
- how they performed against expectations in each subject; and
- how much effort they made.

To encourage parents to become actively involved in their child’s learning, teachers should discuss what they can do for their child to:

- ensure progress;
- improve learning; and
- support them to achieve their potential.

### The Key Stage 3 statutory reporting requirements

The Education (Pupil Reporting) Regulations (Northern Ireland) 2009 (HMSO, 2009; see also DENI circular 2009/15) outline the Key Stage 3 statutory reporting requirements. Schools must provide annual reports to parents of pupils in Key Stage 3 by June 30 each year. Schools may choose to report to parents more often. The annual report should include brief details about the pupil’s achievement in the following:

- the Key Stage 3 Areas of Learning (RE is optional);
- the Cross-Curricular Skills;
- the Other Skills (Thinking Skills and Personal Capabilities);
- interests and strengths;
- focus for development; and
- any further optional content.

At the end of Key Stage 3, schools must also inform parents which Level of Progression their child has achieved in the Cross-Curricular Skills of Communication, Using Mathematics (from 2012/13), and Using ICT (from 2013/14).

It is statutory for all subjects to give pupils opportunities to acquire and develop the Cross-Curricular Skills and Thinking Skills and Personal Capabilities. Not all subjects must assess and report on them. Schools can decide which subjects should assess and report on these skills and capabilities. You can find further details and guidance on reporting at Key Stage 3 at [www.nicurriculum.org.uk](http://www.nicurriculum.org.uk).

### Effective reporting procedures

Schools have the option of using the SIMs module Profiles 7 to generate report templates and to create subject comment banks. Schools must have effective reporting procedures in place to ensure they have a consistent approach to reporting at Key Stage 3. Effective reporting procedures should:

- be efficient and manageable;
- reflect the integrated nature of assessment and reporting;
- reflect the language of the Northern Ireland Curriculum;
- facilitate the integrated reporting of subject knowledge and understanding, and skills and capabilities;
- be based on the teachers’ professional judgement and on dependable assessment evidence;
- be based on a common approach to reporting performance in terms of grades, marks etc;
- be child centred and focus on the individual;
• support improvements in the pupil’s learning;
• encourage pupil motivation and commitment to learning;
• provide meaningful detailed information about the pupil’s achievements and progress and how they can improve their learning;
• support planning for future learning;
• encourage parents’ involvement in their child’s learning; and
• comply with data protection legislation.

Writing effective subject reports
Teachers mainly use reports to tell parents about their child’s progress. Reports are a valuable focus for discussion at parents’ evenings. Subject reports are brief, so it is important to make concise comments that convey key information about a pupil’s progress. Teachers’ comments should be based on a review of the pupil’s individual learning and performance and their specific knowledge of the pupil’s ability, effort and potential. Key criteria to consider when writing comments include:

• performance and progress in this subject area against previous best efforts, including strengths and weaknesses, in work this term/year, for example:
  – self management, organisation and structuring of work;
  – ability to research and manage information;
  – development of conceptual knowledge and understanding;
  – development of subject-specific skills and processes such as problem solving or creativity;
  – ability to communicate in various forms;
  – commitment and effort observed, including working well with others; and
• a specific focus for development and effort to improve future learning, including specific tips if possible.
References

Assessment Reform Group, Assessment for Learning: 10 Principles (University of Cambridge School of Education, 2002)


CCEA, Thinking Skills and Personal Capabilities Progression Maps at Key Stage 3, available at www.nicurriculum.org.uk (2009b)

CCEA, Guide to Assessment: Supporting Schools in Meeting Statutory Requirements for Assessment and Reporting, Foundation Stage to Key Stage 3, available at www.nicurriculum.org.uk (2011)


DENI, Every School a Good School: A Policy for School Improvement, available at www.deni.gov.uk (2009a)


Montgomery, D, *Educating the Able* (Cassell, 1996)


Teaching and Learning Research Programme, *Assessment in Schools: Fit for Purpose?*, available at www.tlrp.org (University of London, 2010)


*Please note that all web addresses were correct at time of publication.*
Appendices
Appendix 1:
The ‘Big Picture’ of Assessment and Reporting

AIM OF ASSESSMENT
To facilitate the monitoring of standards over time in order to inform the development of policy and practice leading to better pupil outcomes

PRINCIPLES
Assessment should:
1 be complementary to, and supportive of, the key aims of the NI Curriculum
2 be fit for purpose
3 be manageable
4 be supported by teacher professional judgements that are consistent and reliable
5 be appropriate at all levels for system-wide accountability

PURPOSES
DIAGNOSTIC
To identify strengths and areas for improvement and to inform next steps
FORMATIVE
To use assessment information to make specific improvements in learning
SUMMATIVE
To acknowledge, record and report pupils’ overall performance and achievement at a point in time
EVALUATIVE
To inform curriculum planning and to provide information for monitoring and accountability

WHAT IS ASSESSED?
Pupil performance and achievement in ...

FOUNDATION STAGE
Assessment:
• Assess pupil progress in each CCS
• Assess pupil progress in each of the Other Skills (TSPC)
• Assess pupil progress in each AoL
Reporting:
• Annual Report
• Parent Meetings
• Annual Review *

KEY STAGE 1 & KEY STAGE 2
Assessment:
• Assess pupil progress in each CCS
• Use of CCEA designed tasks Years 4 & 7
• Assess pupil progress in each of the Other Skills (TSPC)
• Assess pupil progress in each AoL
Reporting:
• Annual Report
• Years 4 & 7 numerical outcomes for CCS and additional school/system information to parents
• Years 4 - 7 computer-based assessments, autumn term
• Parent Meetings
• Annual Review *

KEY STAGE 3
Assessment:
• Assess pupil progress in each CCS
• Use of CCEA approved tasks Year 10
• Assess pupil progress in each of the Other Skills (TSPC)
• Assess pupil progress in each AoL
Reporting:
• Annual Report
• Year 10 numerical outcomes for CCS and additional school/system information to parents
• Parent Meetings
• Annual Review/Transition Plans *

CROSS-CURRICULAR SKILLS (CCS)
Assessment: a robust model of moderated teacher judgement

OTHER SKILLS (Thinking Skills and Personal Capabilities: TSPC)
Assessment: delegated to schools

AREAS OF LEARNING (AoL)
Assessment: delegated to schools

ASSESSMENT AND REPORTING REQUIREMENTS

USING ASSESSMENT OUTCOMES TO INFORM NEXT STEPS PLANNING

AT CLASSROOM LEVEL: What level are my pupils now? Where do they need to be next with an appropriate level of challenge? What are the best strategies to help pupils reach the ‘next steps’ in their learning?

AT CO-ORDINATOR LEVEL: How is my area of responsibility performing compared with recent 3 year trends? How is my area of responsibility performing compared with other curriculum areas? What are the priorities for improving provision within my area of responsibility?

AT WHOLE SCHOOL LEVEL: How is our school performing, compared with recent 3 year trends? How is our school performing compared with other schools in similar circumstances? What are our whole school priorities for improving pupil outcomes, especially in Literacy and Numeracy?

* EDUCATION (NORTHERN IRELAND) ORDER 1996 Code of Practice on the Identification and Assessment of Special Educational Needs 1 September 1998
Appendix 2:

Planning and Evaluating Assessment: Key Questions

Here are some questions that might be helpful for school self-evaluation and development planning. School principals and senior leaders should use them selectively as a focus for discussion. They can also use them to develop quality indicators to evaluate their school’s assessment policy and practice.

Manageability

- To what extent is assessment straightforward, manageable and fit for purpose? (Assessment should not divert professional time and resources away from the core business of teaching and learning.)
- Does assessment evidence provide sufficient information to meet the school’s purposes?
- Does assessment provide meaningful information about each pupil’s progress and performance?
- Is there a manageable, easily accessible system for recording assessment information?

Assessment approaches

- What are the current methods of assessment used?
- Are the current methods of assessment effective?
- How do teachers assess skills and personal capabilities?
- Do teachers use a wide range of assessment methods effectively?
- Are AfL strategies part of school assessment practice?
- To what extent do teachers use peer and self-assessment strategies?

Coherence

- Is assessment integral to teaching and learning?
- Do all staff understand the agreed written assessment policy?
- Do school processes, development planning policy, and procedures and practices reflect the assessment policy?
- Are the purposes of assessment clear in this policy?
- Is there clear guidance about the purposes and methods of assessment, the range of evidence, and assessment information to use?
- Are there clear connections between the assessment of subject knowledge and understanding, the Cross-Curricular Skills and TSPC?
- How well do teachers use assessment for both formative and summative purposes?
- Can pupils talk about their learning and progress?

Consistency

- Is there a shared common approach to assessment at Key Stage 3?
- To what extent are those involved in assessment clear about its purposes?
- Is there an agreed understanding about pupil expectations and standards in relation to knowledge and understanding, the Cross-Curricular Skills and TSPC?
- To what extent is there common agreement about pupil expectations and standards across the Key Stage?
- How are assessment processes and standards quality assured?
- Are there internal standardisation procedures?
- Would assessment judgements stand up to scrutiny from external moderation?
Teacher, pupil and parent involvement

- Is there a collaborative approach to planning and developing assessment that is led by the school leadership team? Does it involve appropriate staff?
- Do pupils play an active role in assessment according to their age, ability, and educational needs?
- Do pupils have opportunities to engage in peer and self-assessment?
- How are parents involved in their children’s assessment?
- Is assessment information clearly communicated to parents?

Equity and fairness

- Do pupils have equal opportunities to access learning?
- Is assessment free from systematic bias?
- Is the assessment process open and transparent to teachers, pupils and parents?
- Are processes in place to ensure that assessment is fair?
- Does the language used in assessment instruments present a potential barrier to opportunity equality for pupils?
- Do assessment instruments use a range and balance of background contexts that reflect the diversity of the school and wider population?
- Do assessment instruments avoid the use of stereotypes?

Continuing professional development

- Are all teachers familiar with using different assessment methods and their purposes?
- To what extent do teachers have a sound knowledge of assessment and the professional skills to develop and apply them in practice?
- Are staff engaged in ongoing professional development and support to improve assessment practices?
- Is staff development/training planned to enhance teachers’ understanding of assessment and assessment standards?
- Are priorities for staff development identified and clearly matched to the school development plan?

Impact of assessment

- Do all those involved have a clear understanding of what quality assessment means?
- Does the school make effective use of assessment information to inform teaching and learning?
- Does the school use the self-evaluation process to evaluate assessment?
- How does the school measure the impact of assessment on pupil outcomes?
- Does assessment practice ensure that all pupils know how well they are doing and how to improve their learning?
- Does assessment practice help all parents to understand how their child is progressing and what they can do to support their child and the teacher?
Appendix 3:

**Suggested Strategies for Peer and Self-Assessment**

The examples below show how these strategies can support pupils to develop their skills and capabilities and how their learning benefits.

<table>
<thead>
<tr>
<th>Peer and self-assessment strategies</th>
<th>Suggested ways to use these strategies in the classroom</th>
<th>Main learning benefits for the pupil</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Generic posters and prompt cards</strong>&lt;br&gt;Use generic posters and prompt cards with key questions about the pupils’ learning experience.</td>
<td>Use the poster in a plenary session with a focus on key question(s) that might include:&lt;br&gt;&lt;br&gt;<strong>What approach did you take?</strong>&lt;br&gt;<strong>What skills did you use?</strong>&lt;br&gt;<strong>What could you have done differently?</strong>&lt;br&gt;<strong>What are you still unsure about?</strong></td>
<td>Helps pupils to develop the ability to focus and sustain attention on learning&lt;br&gt;&lt;br&gt;Helps to develop pupils’ <strong>Communication (Literacy) Skills</strong>&lt;br&gt;<strong>(Talking and Listening)</strong>&lt;br&gt;&lt;br&gt;Encourages pupils to develop a language to describe their learning experience and thinking and learning processes&lt;br&gt;&lt;br&gt;Helps to make pupils more aware of how they learn and the processes involved</td>
</tr>
<tr>
<td><strong>Traffic lights</strong>&lt;br&gt;Pupils use ‘traffic lights’, red, amber and green, to signify their level of understanding or ability to demonstrate certain skills/capabilities.</td>
<td>Pupils show coloured cards during the activity, or state red, amber or green, to indicate their level of understanding or skills development, for example:&lt;br&gt;&lt;br&gt;<strong>Red</strong> – very unsure about something or not able to demonstrate certain skills/capabilities&lt;br&gt;&lt;br&gt;<strong>Amber</strong> – not quite sure about something or uncertain about their ability to demonstrate certain skills/capabilities&lt;br&gt;&lt;br&gt;<strong>Green</strong> – confident in their understanding or ability to demonstrate certain skills/capabilities</td>
<td>Encourages pupils to talk about their learning&lt;br&gt;&lt;br&gt;Supports pupils’ development of <strong>Self Management Skills</strong> – encourages pupils to reflect on their learning and to identify strengths and areas for improvement</td>
</tr>
</tbody>
</table>
### Peer and self-assessment strategies

<table>
<thead>
<tr>
<th>Suggested ways to use these strategies in the classroom</th>
<th>Main learning benefits for the pupil</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Active listening, asking effective questions</strong>&lt;br&gt;Encourage pupils to listen actively and ask effective questions of peers.</td>
<td>Helps to develop pupils’ <strong>Communication (Literacy) Skills</strong> (Talking and Listening) Supports pupils to develop their capability to <strong>Manage Information</strong> – to plan and pose questions Enables pupils to develop their skills of <strong>Working with Others</strong> – to respond sensitively and constructively to others</td>
</tr>
<tr>
<td>When they have finished an activity, pupils give a presentation about their work or produce a piece of work. The class forms groups to review the pupil's work. One person in each group takes down points for clarity or for further development and gives them to the pupil as feedback. The pupil being reviewed has to act on this feedback by making the suggested improvements and then provide the class with an update.</td>
<td></td>
</tr>
<tr>
<td><strong>Anonymous peer review</strong>&lt;br&gt;Pupils review examples of work from anonymous peers against assessment criteria and make suggestions for improvements.</td>
<td>Helps pupils to understand what assessment criteria are and how they are used Helps pupils to get a sense of work standards and what might be considered ‘good’ and ‘poor’ work Supports pupils to develop their capability to <strong>Manage Information</strong> – evaluating information Supports pupils to develop their capability for <strong>Self Management</strong> – encourages pupils to reflect on their learning and to identify strengths and areas for improvement</td>
</tr>
<tr>
<td>The teacher first gives pupils examples of anonymous pupils’ work from a similar assessment task. After discussing the task and assessment criteria, the teacher asks pupils to review the work of their peers, evaluate it against assessment criteria, identify strengths and suggest ways to improve it. Pupils draw on this learning experience when working on their own tasks.</td>
<td></td>
</tr>
<tr>
<td><strong>Two stars and a wish</strong>&lt;br&gt;Pupils review each other’s work and comment on two strengths and one area for improvement. Teachers could also lead this exercise.</td>
<td>Enables pupils to develop their skills of <strong>Working with Others</strong> – to develop routines of turn-taking; to be fair; to suggest ways of improving their approach; and to respond sensitively and constructively to others Supports pupils to develop the capability to <strong>Manage Information</strong> – to compare and evaluate information Helps pupils to develop their capability for <strong>Self Management</strong> – encourages pupils to reflect on their learning and to identify strengths and prioritise areas for improvement</td>
</tr>
<tr>
<td>Working in groups or pairs, pupils review and evaluate each other’s work before they hand it in to the teacher. They then make oral or written comments about other pupils’ pieces of work. Pupils use this feedback to make improvements.</td>
<td></td>
</tr>
</tbody>
</table>
### Peer and self-assessment strategies

<table>
<thead>
<tr>
<th><strong>Checklists</strong></th>
<th><strong>Suggested ways to use these strategies in the classroom</strong></th>
<th><strong>Main learning benefits for the pupil</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>The teacher provides a list of key points that a piece of pupil’s work might cover. Pupils use the checklist to explore to what extent these are covered in the piece of work.</td>
<td>After completing a task, pupils use a checklist to identify whether or not key points are met in their own or others’ work. Teachers use this as a focus to discuss what further information they would need to judge the quality of the work.</td>
<td>Supports pupils to develop the capability to <strong>Manage Information</strong> – to compare and evaluate information</td>
</tr>
<tr>
<td><strong>Model answers</strong></td>
<td>After completion of a task, the teacher provides pupils with model solutions/answers and assessment criteria, with a focused discussion around what makes this an example of ‘good’ work. In pairs or groups pupils discuss their work and make comparisons against the model. Pupils highlight two or three areas to develop and suggest how they can improve them.</td>
<td>Helps pupils to learn how to use assessment criteria</td>
</tr>
<tr>
<td>The teacher provides model solutions and answers alongside assessment criteria.</td>
<td>Helps pupils to clarify and understand the demands of the task</td>
<td></td>
</tr>
<tr>
<td>Helps pupils to get a sense of standards and what might be considered ‘good’ work</td>
<td>Enables pupils to develop their skills to <strong>Be Creative</strong> – to recognise and accept evaluative comments about their personal performance</td>
<td></td>
</tr>
</tbody>
</table>

### Pupils develop assessment criteria

<p>| <strong>Pupils develop assessment criteria</strong> | <strong>Pupils and the teacher discuss ways that pupils’ learning could be assessed, for example: What should be assessed? Why should this be assessed? How should this be assessed?</strong> Pupils are asked to produce a task that assesses their knowledge and understanding and skills/capabilities and create a few assessment criteria. In groups, pupils review each other’s tasks and criteria. Each group agrees on one task and set of criteria and uses these to assess and mark pupils’ work from another group. When they have completed the activity, pupils discuss how they judged the work and whether they were fair and consistent. The teacher provides support and direction as the pupils require it. | <strong>Helps pupils to deepen their understanding about assessment criteria and how to use them</strong> |
| After completing a topic, pupils design an assessment task and create assessment criteria. The teacher can develop this activity by asking pupils to produce a mark scheme. | Supports pupils to develop their <strong>Thinking, Problem-Solving and Decision-Making Skills</strong> – pupils have to clarify the problem by working out what type of task to design and what assessment criteria to use; pupils have to develop a line of reasoning and use evidence to support their judgements | Helps to develop pupils’ <strong>Communication (Literacy) Skills</strong> (Talking and Listening) |
| | Enables pupils to develop their skills of <strong>Working with Others</strong> – to express their views and explore different opinions and reach an agreed outcome. | |</p>
<table>
<thead>
<tr>
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<th>Main learning benefits for the pupil</th>
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<tr>
<td><strong>Pupil e-portfolios/learning journals/diaries</strong>&lt;br&gt;Pupils review, monitor, evaluate and regularly update and record their work in an e-portfolio, learning journal, or diary.</td>
<td>As part of a whole-school approach, pupils record their learning and progress in a journal, diary, or e-portfolio. Part of this process may involve pupils selecting samples of their best work in each subject and uploading them to their e-portfolio. They can also record information about their extra-curricular activities and hobbies.&lt;br&gt;&lt;br&gt;Pupils should be encouraged to evaluate their learning in all subjects, to set targets and identify ways to improve their work. This allows pupils the flexibility to use video, podcasts and photographs to record and present their work.</td>
<td>Helps to develop pupils’ <strong>Communication (Literacy) Skills</strong> (Talking and Listening)&lt;br&gt;&lt;br&gt;Supports pupils to develop the capability to <strong>Manage Information</strong> – to record and present information in a range of formats, taking into account audience and purpose; structure and present information in a coherent way&lt;br&gt;&lt;br&gt;Supports pupils to develop their <strong>Thinking, Problem-Solving and Decision-Making Skills</strong> – pupils evaluate, justify and make decisions about the pieces of work they have selected for the portfolio&lt;br&gt;&lt;br&gt;Supports pupils to develop the capability for <strong>Self Management</strong> – prioritise and plan aspects of their work to meet time bound targets; monitor their work/performance and progress; show independence in working to make improvements.</td>
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</tbody>
</table>
# Glossary of Assessment Key Terms

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
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<tbody>
<tr>
<td>Achievement</td>
<td>The extent to which pupils demonstrate their knowledge, understanding, skill and capabilities</td>
</tr>
<tr>
<td>Assessment</td>
<td>The systematic collection, interpretation and use of information to provide a deeper understanding of what pupils know and understand, their skills and personal capabilities and what they can do as a result of their learning experiences.</td>
</tr>
<tr>
<td>Assessment criteria</td>
<td>Define what the pupil is being measured against by the assessment. They specify what the pupil should be able to demonstrate as a result of their learning experience.</td>
</tr>
<tr>
<td>Assessment instrument</td>
<td>A tool used to gather information about pupil performance and achievement such as tasks, tests and school subject examinations.</td>
</tr>
<tr>
<td>Assessment for Learning/Formative assessment</td>
<td>The process of seeking and interpreting evidence for pupils and teachers to use to decide where the learners are in their learning, where they need to go and how best to get there. (Assessment for Learning is often used interchangeably with formative assessment).</td>
</tr>
<tr>
<td>Assessment literacy</td>
<td>Having the knowledge, understanding and skills required for quality assessment practice</td>
</tr>
<tr>
<td>Assessment method</td>
<td>A technique used to collect data generated from an assessment</td>
</tr>
<tr>
<td>Assessment task</td>
<td>A task that is specifically designed to assess pupils’ ability to demonstrate aspects of their knowledge, understanding, skills and capabilities</td>
</tr>
<tr>
<td>Benchmark</td>
<td>A minimum standard that can be used at the levels of the individual, class, school and system to compare performance and progress.</td>
</tr>
<tr>
<td>Continuous assessment</td>
<td>The ongoing process of gathering assessment evidence over a set period</td>
</tr>
<tr>
<td>Criteria referenced assessment</td>
<td>Assessment against agreed, fixed criteria that describe the knowledge, understanding and skills that pupils need to demonstrate in order to achieve a particular level. Pupils are not assessed against the performance others.</td>
</tr>
<tr>
<td>Dependability</td>
<td>The level of confidence in the results generated by an assessment. Maximum validity and optimal reliability contribute to the dependability of an assessment.</td>
</tr>
<tr>
<td>Diagnostic assessment</td>
<td>Used to identify the strengths and weaknesses in a pupil’s learning and to highlight the nature of specific learning problems. The information from the assessment is used to plan future teaching and learning, including developing and putting in place intervention strategies to support improvements in the pupil’s learning.</td>
</tr>
<tr>
<td>Evaluative assessment</td>
<td>Used to inform curriculum planning and for monitoring and accountability purposes</td>
</tr>
<tr>
<td>Fitness for Purpose</td>
<td>An assessment that is fit for purpose provides a measure of what it was intended to assess. An assessment designed for one purpose may not be suitable for another.</td>
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<td>Term</td>
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<tr>
<td>Integrated assessment approach</td>
<td>A way of assessing skills and capabilities alongside subject knowledge and understanding</td>
</tr>
<tr>
<td>Ipsative assessment</td>
<td>Pupils are assessed against their personal best performance.</td>
</tr>
<tr>
<td>Learning (intended) outcomes</td>
<td>A description of what the pupil should know, understand or be able to do at the end of a lesson or activity</td>
</tr>
<tr>
<td>Levels of Progression</td>
<td>Used to assess pupil performance in the Cross-Curricular Skills of Communication, Using Mathematics and Using ICT. The Levels of Progression for each skill range from one to seven. Pupil performance is judged against the assessment criteria that define each level.</td>
</tr>
<tr>
<td>Low Achievement</td>
<td>When a pupil is achieving to the full extent of her or his ability, but is well below average compared to her or his peers</td>
</tr>
<tr>
<td>Moderation</td>
<td>Teachers compare judgements about pupil performance against assessment criteria and standards. This involves teachers working collaboratively to establish a shared understanding of assessment standards to ensure that there is a consistent application of standards.</td>
</tr>
<tr>
<td>Norm-referenced assessment</td>
<td>Pupil performance is scored and judged against the performance of others.</td>
</tr>
<tr>
<td>Peer assessment</td>
<td>A group of pupils make judgements about each other’s performance and learning and suggest ways to improve their learning.</td>
</tr>
<tr>
<td>Progression</td>
<td>A pupil is viewed as showing progression in terms of the breadth and depth of their learning if they are acquiring, developing and consolidating knowledge, understanding and skills at a rate that is typical of pupils of similar ability working at the same level within the Key Stage.</td>
</tr>
<tr>
<td>Quality indicators</td>
<td>Used to illustrate the key features that contribute to quality assessment policy and practice. These are used in the school self-evaluation process for monitoring, reviewing and evaluating assessment policy and practice.</td>
</tr>
<tr>
<td>Reliability</td>
<td>The extent to which an assessment can be trusted to give consistent information on a pupil's progress.</td>
</tr>
<tr>
<td>Scaffolding reflection</td>
<td>Supporting pupils to reflect on their learning by giving them time to recognise what and how they are learning and enabling them to make progress</td>
</tr>
<tr>
<td>Self assessment</td>
<td>Pupils reflect on their learning, make judgements about their performance and identify ways to improve their learning.</td>
</tr>
<tr>
<td>Standard</td>
<td>A statement about the degree of quality to be attained in an assessment.</td>
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<tr>
<td>Success criteria</td>
<td>Statements that clearly define what the pupil is being assessed against and can be thought of as the pupil-friendly version of assessment criteria</td>
</tr>
<tr>
<td>Summative assessment</td>
<td>Used to determine a pupil’s learning at a particular point</td>
</tr>
<tr>
<td>Underachievement</td>
<td>When a pupil’s performance is below what is expected, based on their ability.</td>
</tr>
<tr>
<td>Validity</td>
<td>The extent to which an assessment provides a measure of what it was intended to assess.</td>
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</tbody>
</table>